



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,894	08/28/2003	Jason Robert McGee	RSW920030102US1	8718
36736	7590	08/16/2007		
DUKE W. YEE			EXAMINER	
YEE & ASSOCIATES, P.C.			BUI, BRYAN P	
P.O. BOX 802333				
DALLAS, TX 75380				
			ART UNIT	PAPER NUMBER
			2109	
			MAIL DATE	DELIVERY MODE
			08/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/650,894

Applicant(s)

MCGEE ET AL.

Examiner

Bryan P. Bui

Art Unit

2109

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 08/28/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This communication is responsive to Application No. 10/650894 filed on 08/28/2003 in which claims 1-20 and Figures 1-7 are presented for examination.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 08/28/2003 has been received and entered into the record. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Status of Claims

Claims 1-20 are pending in this application.

Claims 1, 11 and 19 are independent claims.

Claims 1-20 are rejected for the reasons discussed in detail below.

Specification

3. The abstract of the disclosure is objected to because of its undue length. Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The abstract should describe the

disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claim 20 is objected to because of the following informalities:

Claim 20, depending on claim 19, recites "The computer program product". However, claim 19 is directed to "An apparatus". Therefore, claim 20 is improper dependent claim. It seems applicant is referring to previously mentioned "An apparatus" as cited in claim 19. If so, applicant is suggested to rewrite the claim to read as "The apparatus of claim 19, further comprising:...". Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 11-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 11 recites the limitation of "[A] computer program product in a computer readable medium" which is interpreted as a medium of instructions and a variety of

forms regardless of the particular type of signal bearing media actually used to carry out the invention (see applicant's specification: line 3 - line 18). According to second paragraph on page 28 of the applicant's specification, a computer-readable medium includes "recordable-type media, such as a floppy disk, a hard disk drive, a RAM, CD-ROMs, and transmission-type media, such as, for example, radio frequency and light wave transmissions". Thus, the specification defines "computer readable medium" as including **intangible media** such as signals, carrier waves, transmission media or other media incapable of being touch or perceived absent the tangible medium through which they are conveyed, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14.

Also, claim 11 appears to represent nonfunctional descriptive material. Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data. When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no

requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored in a computer-readable medium, in a computer, on an electromagnetic carrier signal does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer."). Such a result would exalt form over substance. See also *In re Johnson*, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus, nonstatutory music is not a computer component and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law.

Claims 12-18, depending on claim 11, are rejected for the same reason as set forth above.

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four categories of invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2109

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 11 and 19, the word "may"(cited in claim 1, line 4; claim 11, line 6; claim 19, line 5) renders those claims indefinite because it is unclear whether the limitation(s) following the word "may" are part of the claimed invention. See MPEP § 2173.05(d).

Claims 2-10, depending on claim 1, are therefore rejected for the same as claim 1.

Claims 12-18, depending on claim 11, are therefore rejected for the same as claim 11.

Claim 20, depending on claim 19, is therefore rejected for the same as claim 19.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 3, 7, 10, 11, 13, 15, 18 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Ramme (US Patent Application Publication No.2003/0093420 A1) (hereinafter "Ramme").

Regarding claim 1, Ramme teaches a method comprising:

A) "determining if the web application includes a reference to at least one shared web module that may be incorporated into a plurality of web applications"; and

B) "identifying a location of the at least one shared web module; and

C) "logically merging the at least one shared web module with web modules of the web application, if any, to generate a logically merged web application"

With respect to A), the examiner notes that Ramme teaches the claimed features of "determining if the web application includes a reference to at least one shared web module that may be incorporated into a plurality of web applications" as **[For information which is sharable among two or more entities such as applications which have module files stored in module directories, the sharable information is stored in one of the module directories, and a link to that directory is stored in each of the directories of the modules that share the information]** (see Ramme, paragraph [0013] on page 1).

With respect to B), the examiner notes that Ramme teaches the claimed features of "identifying a location of the at least one shared web module" as **[A search**

may be performed by first searching the directory of the module . If the file is not found, then the link is used to access the directory upon which the module's directory depends, so that it may be searched in a similar manner. The search may continue iteratively from one directory to another, until the file is located] (see Ramme, paragraph [0031] on page 3).

With respect to C), the examiner notes that Ramme teaches the claimed features of "logically merging the at least one shared web module with web modules of the web application" as **[For example, this particular arrangement of the files and links imposes a hierarchical structure on the directory storage ,in the form of a directed acyclic graph]** (see Ramme, paragraph [0035] together with Figure 1 elements (120,122, 124, 126)).

Regarding claim 3, Ramme further discloses the claimed feature of "determining if the web application includes a reference to at least one shared web module includes determining if the web application includes a shared web module designation file" as **[The link may be a real link, such as a Unix link, or it may be implemented as a file with a directory specification stored in association with the directory storage area]** (see Ramme, paragraph [0057]) and **[The link file may include all necessary information for accessing another software component, i.e., may include information on a dependent directory storage area and optionally, may include information on software component available at the dependent**

directory area] (see Ramme, paragraph [0058]).

Regarding claim 7, Ramme further discloses the claimed feature of “the steps of determining, identifying, and logically merging are performed during an initialization process of a runtime environment for initializing the web application to be run on a server” **[the user processing device and the server unit may be part of a distributed system ...and the server unit may be accessed from the client unit over a network using the directory links]** (see Ramme, paragraph [0281] and Figure 7).

Regarding claim 10, Ramme further discloses the claimed feature of “logically merging the at least one shared web module with web modules of the web application includes at least one of relinking references to the at least one shared web module in the web modules of the web application, extrapolating policy information for the at least one shared web module from a policy file associated with the web application, and modifying a class path for the web application to include paths to each of the at least one shared web module” as **[Thus, any application program accessing the first directory storage area regarding software components originally stored at this directory storage area will be redirected through the directory link to the second directory storage area now storing the software component. Thus, complicated updating operations of a potentially large number of directory links can be**

minimized or avoided] (see Ramme, paragraph [0049] on page 4 &5).

Regarding claims 11 and 19, all the limitations of those claims have been noted in the rejection of claim 1. Thus, they are rejected for the same rationale as claim 1.

Regarding claim 13, all the limitations of this claim have been noted in the rejection of claim 3. Thus, it is rejected for the same rationale as claim 3.

Regarding claim 15, all the limitations of this claim have been noted in the rejection of claim 7. Thus, it is rejected for the same rationale as claim 7.

Regarding claims 18, all the limitations of this claim have been noted in the rejection of claim 10. Thus, it is rejected for the same rationale as claim 10.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 4, 5, 9, 12, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramme (US Patent Application Publication No. 2003/0093420 A1) in view of Spotswood et al. (US Patent Application Publication No. 2004/0255293 A1)

("Spotswood").

Regarding claim 2, most of the limitations of this claim have been noted in the rejection of claim 1. However, Ramme does not expressly disclose the claimed feature of "loading the logically merged web application into a web container". Spotswood et al, from the same or similar field of endeavors, discloses the application server constructs the application container with the application components in the order in which they were retrieved, resulting in a hierarchical classloader structure in the newly constructed application (see Spotswood, paragraph [0076] on page 5 together with Figure 6). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references to achieve the claimed feature of "loading the logically merged web application into a web container" (as cited in claim 2). Such combination would have permitted teaching's Spotswood to allow Ramme's to better control over the reloading and namespace separation of individual modules, including EJB's (see Spotswood, paragraph [0019]).

Regarding claim 4, most of the limitations of this claim have been noted in the rejection of claim 1. However, Ramme does not expressly disclose the claimed feature of "the web application is an enterprise archive (EAR) " and "the logically merged web application is a logically merged EAR". Spotswood et al, from the same or similar field of endeavors, discloses an application is normally packaged in an Enterprise Archive (EAR) file containing application class (see Spotswood, paragraph [0049] on page 3

Art Unit: 2109

and Figure 3,element (150)).Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references to achieve the claimed features of "the web application is an enterprise archive (EAR)" and "the logically merged web application is a logically merged EAR" (as cited in claim 4). Such combination would have permitted teaching's Spotswood to allow Ramme's to better control over the reloading and namespace separation of individual modules, including EJB's (see Spotswood, paragraph [0019]).

Regarding claim 5, most of the limitations of this claim have been noted in the rejection of claim 1. However, Ramme does not expressly disclose the claimed feature of "the at least one shared web module includes at least one of a web archive (WAR) file, an enterprise java bean (EJB) archive file, and a resource archive (RAR) file". Spotswood et al, from the same or similar field of endeavors, further discloses that everything within an EAR file is considered part of the same application. Spotswood also discloses the following may be part of an EAR or can be loaded as standalone applications: An Enterprise JavaBean (EJB) JAR file; A Web Application WAR file; and/or Resource Archive (RAR) file (see Spotswood, paragraph [0049],[0050], [0051]and [0052] on page 3). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references to achieve the claimed feature of "the at least one shared web module includes at least one of a web archive (WAR) file, an enterprise java bean (EJB) archive file, and a resource archive (RAR) file" (as in claim 5). Such combination would have

Art Unit: 2109

permitted teaching's Spotswood to allow Ramme's to better control over the reloading and namespace separation of individual modules, including EJB's (see Spotswood, paragraph [0019]).

Regarding claim 9, most of the limitations of this claim have been noted in the rejection of claims 1 and 2. However, Ramme does not expressly disclose the claimed feature of "the container uses one or more application program interfaces (APIs) to identify a path to the at least one shared web module and loads the at least one shared web module when loading the logically merged web application". Spotswood et al, from the same or similar field of endeavors, discloses EJB classes are invoked through an interface, it is possible to load individual EJB implementation classes in their own classloader (see Spotswood, paragraph [0078]). Spotswood et al. further discloses after the redeploy command, the developer can then provide a list of files relative to the root of the exploded application that they want to update. This might be the path to a specific element, or a module, or any set of elements and modules (see Spotswood, paragraph [0080] on page 5). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references to achieve the claimed feature of "the container uses one or more application program interfaces (APIs) to identify a path to the at least one shared web module and loads the at least one shared web module when loading the logically merged web application" (as in claim 9). Such combination would have permitted teaching's Spotswood to allow Ramme's to better control over the reloading and namespace separation of individual

Art Unit: 2109

modules, including EJB's (see Spotswood, paragraph [0019]).

Regarding claims 12 and 20, all the limitations of those claims have been noted in the rejection of claim 2. Thus, they are rejected for the same rationale as claim 2.

Regarding claims 17, all the limitations of this claim have been noted in the rejection of claim 9. Thus, it is rejected for the same rationale as claim 9.

9. Claims 6, 8, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramme (US Patent Application Publication No. 2003/0093420 A1) in view of Croney et al. (US Patent Application Publication No. 2004/0255233 A1) ("Croney").

Regarding claim 6, most of the limitations of this claim have been noted in the rejection of claim 1. However, Ramme does not expressly disclose the claimed feature of "determining a priority associated with the at least one shared web module" and "resolving any conflicts between shared web modules in the at least one shared web module and conflicts between the at least one shared web module and web modules of the web application, if any". Croney et al, from the same or similar field of endeavors, discloses the server system can be configured to control which of multiple master pages are utilized to form a resulting page based upon predetermined criteria that are satisfied by the occurrence of one or more events or circumstances (see Croley et al., paragraph

Art Unit: 2109

[0056]). Croney et al. further discloses that the modules of the server system can be configured with appropriate computer-executable instructions to recognize predetermined criteria that imposed by a master page, client system, or server system and to recognize when these predetermined criteria have been satisfied (see Croney et al., paragraph [0058]). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references to achieve the claimed features of “determining a priority associated with the at least one shared web module” and “resolving any conflicts between shared web modules in the at least one shared web module and conflicts between the at least one shared web module and web modules of the web application, if any” (as cited in claim 6). Such combination would have permitted teaching's Croney to allow Ramme's to avoid duplicating of code and content between multiple web pages and unnecessarily filling up the storage with duplicative content (see Croney, paragraph [0007]).

Regarding claim 8, most of the limitations of this claim have been noted in the rejection of claim 1. However, Ramme does not expressly disclose the claimed feature of “logically merging the at least one shared web module with the web modules of the web application includes using a service provider interface (SPI) that provides merge logic for merging different module types”. Croney et al, from the same or similar field of endeavors, discloses a user may enter commands and information into the computer through keyboard, pointing device or other input devices which are often connected to the processing unit through a serial port interface coupled to system bus. Alternatively,

Art Unit: 2109

the input devices may be connected by other interfaces, such as a parallel port, a game port or a universal serial bus (USB) (see Croney et al., paragraph [0066]). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references to achieve the claimed feature of "logically merging the at least one shared web module with the web modules of the web application includes using a service provider interface (SPI) that provides merge logic for merging different module types" (as in claim 8). Such combination would have permitted teaching's Croney to allow Ramme's to avoid duplicating of code and content between multiple web pages and unnecessarily filling up the storage with duplicative content (see Croney, paragraph [0007]).

Regarding claim 14, all the limitations of this claim have been noted in the rejection of claim 6. Thus, it is rejected for the same rationale as claim 6.

Regarding claim 16, all the limitations of this claim have been noted in the rejection of claim 8. Thus, it is rejected for the same rationale as claim 8.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Saxton (US Pat No. 6,370,549 B1)

Carrer et al. (US Pat No. 7,185,342 B1)

Marvin (US PGPub No. 2004/0172618 A1)

Kim et al. (US PGPub No. 2004/0122912 A1)

Bellinger et al. (US PGPub No. 2003/0191826 A1)

Brayton et al. (US PGPub No. 2004/0205564 A1)

Coleman (US PGPub No. 2004/0054793 A1)

Spotswood et al. (US PGPub No. 2003/0229888 A1)

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan Bui whose telephone number is (571)-270-1981. The examiner can normally be reached on Monday-Friday from 7:30 am to 5:00 pm (EST). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Coby can be reached on (571)-272-4017. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

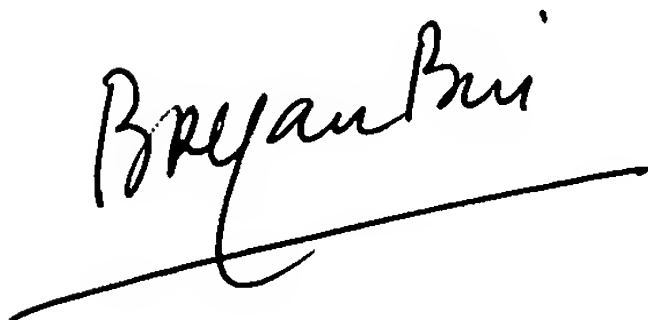
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public

Art Unit: 2109

PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pairedirect.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from USPTO Customer Service Representative or access to the automated information system, call 1-(800)-786-9199 (in U.S.A. or Canada) or 1-(571)-272-1000.

Examiner


FRANTZ COBY
SUPERVISORY PATENT EXAMINER



Bryan P. Bui